Towards evidence-based weaning: a mechanism-based pharmacometric model to characterize iatrogenic withdrawal syndrome in critically-ill children

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Supplemental Material 6: Figure S2

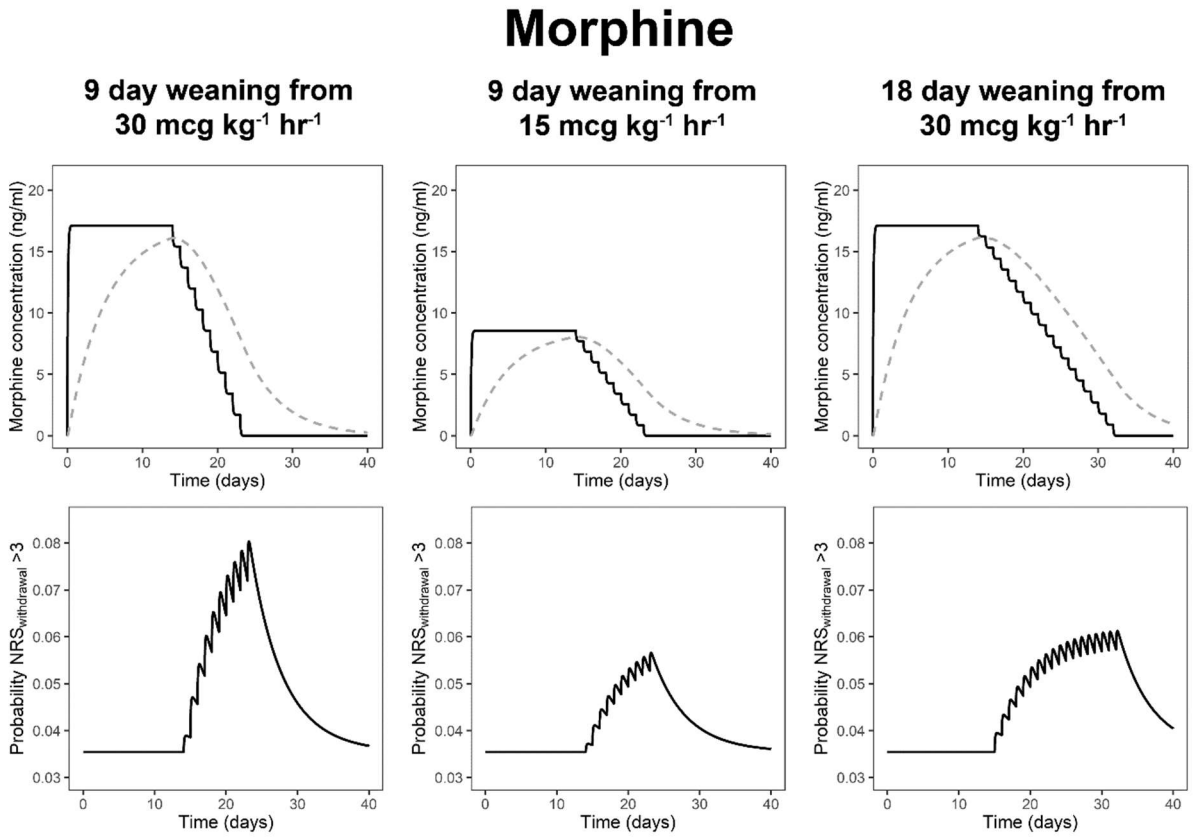

Figure S2. The impact of the morphine infusion rate (30 or 15 mcg kg^{-1} hr^{-1}) during a 14-day treatment period and weaning duration (9 or 18 day weaning) on the risk of iatrogenic withdrawal syndrome (IWS) during weaning in a typical patient with a 10 kg body weight. The top row shows the simulated morphine concentrations in plasma (C_{plasma}, solid black line) and morphine concentrations that the child has become dependent on ($C_{dependence}$, dashed grey line). The bottom row shows the predicted probability of an $NRS_{withdrawal}$ score above 3, which indicates IWS. In all scenarios simulated here, the time between consecutive weaning steps is 24 hours.